

Amendments to Specification:

Please replace paragraph [0012], beginning on page 4, lines 2 through 13 of the originally filed Specification, with the following amended paragraph:

[0012] Briefly stated, the current invention provides a method for the accelerated production of transgenic animals homozygous for a selected trait. The method involves transfecting a non-human mammalian cell-line with a given transgene construct containing at least one DNA encoding a desired gene; selecting a cell line(s) in which the desired gene has been inserted into the genome of that cell or cell-line; performing a nuclear transfer procedure to generate a transgenic animal heterozygous for the desired gene; characterizing the genetic composition of the heterozygous transgenic animal; selecting cells homozygous for the desired transgene through the use of selective agents; characterizing surviving cells using known molecular biology methods; picking surviving cells or cell colonies cells for use in a second round of nuclear transfer or embryo transfer; and producing a homozygous animal for a desired transgene.